

THE PURITY AND VITALITY OF SEEDS.

Mr. Gerald McCarthy, Botanist of our State Experiment Station, has been testing the purity of farms seeds, and Dr. H. B. Battle, Director, publishes the results, which are startling. Dr. Battle says these tests were made on the seeds that are being sold in North Carolina, and which were purchased by the Station. In his Bulletin No. 50, containing much that is instructive and interesting on this subject, we find the results of tests as follows:

Orchard Grass, capable of germinating 33 p'r cent.	
Red Top Grass, " " " " " "	78
Timothy Grass, " " " " " "	83
Italian Rye, " " " " " "	94
Kent's Blue, " " " " " "	8
Red Clover, " " " " " "	83
Alfalfa, " " " " " "	77
White, " " " " " "	67

This is a heavy loss to the farmer. Dr. Battle says:

"Except in regard to the larger sort of seeds, such as cotton, corn, peas, &c., the seeds of field crops are rarely sold entirely free from an admixture of weed seeds. Indeed, most of the weeds now so troublesome in our cultivated fields are European plants, which were originally introduced and widely disseminated in packages of imported seeds.

While the entire exclusion of weed seeds from packages of clover, grass and small grain seed is not to be expected, the farmer is justified in demanding that the real worth of the seeds he purchases shall come up to a reasonable standard. A number of samples of grass and clover seeds recently tested at this Station fall so far below such a standard as to convey the impression that they may have been adulterated, with fraudulent intent, by the seed growers.

The seeds of no two species of plants are exactly alike in size and weight; and, since manufacturers now supply automatic cleaning machinery of very great perfection, there can be no excuse for putting upon the market such seed, for instance, as a sample of Red-top examined, which contained 37.50 per cent. of impurities; and of the pure seed only 53 per cent. were capable of sprouting; or, in other words, in the sample there were only 44.92 per cent. of pure vital seed.

Carelessness on the part of the grower, and a desire to furnish cheaper seeds than competitors, have much to do with the marketing of such impure and semi-worthless seed. The seedsmen are, however, not wholly to blame in this matter.

So long as farmers and gardeners demand cheap seeds, regardless of quality, just so long will persons be found to cater to the demand, even though they are obliged to debase the quality to make up for the low price. Very cheap seeds should be always viewed with suspicion. They are usually the most expensive things that the farmer can buy.

Concerning cheap seeds Dr. William Curruthers, botanist to the Royal Agricultural Society of England, in a report to that body, remarks:

"It is impossible to estimate the injury that an agriculturist does to himself when to save a few shillings in the spring by purchasing inferior seed, he insures at harvest a crop not only poor in itself, but abundantly mixed with seeds of worthless and noxious weeds, whose injury to his crops does not end when they are cut down with the grain. In buying dirty seed he is acquiring material which may prove a serious injury to his crops for years to come."

The Southern farmer who buys such seed loses not only the present money he invests in the purchase of seed and fertilizers, and in the preparation of the land, but also the value of the increase he might reasonably have expected. But this is not all. The cost of eradicating the weeds whose seeds he has unwittingly sown, and the injury they do to his succeeding crops, must also be considered. One sample of clover seed recently examined at this Station contained over five per cent. of dodder seeds. The dodder is a parasitic plant which feeds upon the juices of cultivated plants. It is extremely difficult to get rid of when once introduced into a field. Its seed have been known to sprout after having been buried in the earth for four or five years.

The following standard of purity and vitality of agricultural seeds has been established by the Royal Agricultural Society of England:

1. That 95 per cent. by weight of the seed shall be true seeds of the species claimed.
2. That of the pure seed not less than 90 per cent. shall be capable of sprouting in the case of the clovers, the cereals and Timothy grass. Of

Foxtail grass not less than 20 per cent., and of all other grasses not less than 70 per cent.

English seedsmen are now required by law to guarantee their seeds in accordance with this standard, and in consequence debased seeds are now very rarely found in the English home market. A similar state of affairs prevails in Germany. These laws, however, do not protect foreigners. English and German seedsmen are permitted to export impure seeds, and much adulterated seed thereby reaches our shores. The Germans, as a nation, are noted for their thoroughness in everything. When they undertake to adulterate seed they do it with characteristic perfection. There is in the seed museum of the Station a phial of artistically colored quartz grains, used by German seedsmen to adulterate clover seed, and detected by the Station in clover seed on sale in this State."

HENDERSON ALLIANCE WAREHOUSE.

FIVE POINTS FARMERS' ALLIANCE, 314.

EDITOR FARMER:—I hope you will excuse me for trespassing on your valuable time and space again. In reading our valued and much esteemed official organ THE PROGRESSIVE FARMER, I see extracts from brethren of other sections and States as to how our brethren are getting along. I am constrained to address our brethren again to let them know how we are getting along with our little baby down here in Henderson, namely: The Farmers' Alliance Warehouse. Although only a month old, it has assumed gigantic proportions and can stand alone and walk a little. And just think! She has already cut two wisdom teeth.

Yes, brethren, our warehouse is a certainty and has come to stay in spite of the (devilish) mean chicanery resorted to by those in opposition to the good movement now inaugurated by the Farmers' Alliance for the abolition of trusts, centralization of capital, pools, combinations and monopolies and all other methods of rapid accumulation which is not in accordance with Christian charity and brotherly love as was taught by our blessed Lord and Master.

The subject I wish to discuss is mainly to the brethren of the tobacco-growing section contiguous to the Henderson market, and to again call the attention of the brethren to the fact that Vance County Farmers' Alliance has inaugurated a Farmers' Alliance Warehouse, and are now in successful operation in the town of Henderson, under the direction of Messrs. Butler, Jenkins & Co., and that, too, in defiance of blackmail misrepresentation, unmitigated falsehood and every other means that a depraved conscience could dictate or the action of an overflowing surplus would have on the consciences and hearts of the most depraved.

Yes, brethren, there is being falsehoods circulated about us that would make Annanias and Sapphira blush and hide their faces in shame. One gentleman, high up in counsels of the craft, and with the effrontery that would rival Jesse James, says he will bust our warehouse, if it takes \$50,000 to do it. So you see, brethren, what we have got to contend with, and it behooves us to do all in our power to perpetuate our warehouse interests both here and at Oxford. The Alliance house in Henderson only asks the patronage of our brethren upon conditions of the contract entered into between the Alliance and the independent buyers of our market is faithfully kept, and those terms are as follows: That they will visit our floors every day and see to it that the tobacco offered on our floor shall bring the highest market price; and the only thing they ask us to do is that we will allow no pin-hooking on our floors. But of course if a farmer brings his tobacco and puts it on our floor, he is at liberty to sell it if he wants to; but if he does sell and we find it out, we will mark his name off the ticket and mark the pin-hooker's name on it. So you see the tobacco will have to sell on its merits.

Yes, brethren, the buyers are doing all they promised to do, and even more.

The report is being circulated that our house is not an Alliance house. To such accusations I will simply say they are false and malicious.

Yes, brethren, the tocsin of war is sounded, and it says death to high charges. Yes, our prices are highest and our charges the lowest.

So, brethren, carry a load of tobacco to the Farmers' Alliance Warehouse and you will be satisfied and go back home a drummer. And now in conclusion, brethren, allow me to venture

the assertion that the Farmers' Alliance will, Hannibal-like, know no alps in its march of progress until it has taken the broad expanse of universal domain and

Its influence be felt where'er the sun
His successive journeys run;
His power be felt from shore to shore,
Till man's state wax and wane no more.

Yours truly,

R. P. G.

ORGANIZERS' REPORT.

RIDGEWAY, Warren Co., N. C.,

November 30, 1888.

COL. L. L. POLK.—Dear Sir:—Permit me through the columns of your paper to report to you the work done by me as Organizer of Warren county.

Having recently received my commissions and most of the territory in my portion of the county having been worked up before, I have done but little. I had a meeting to-day and organized White Oak Alliance, with 12 members. They elected Thomas P. Paschall, President and Julius E. Bauzett, Secretary. I have visited some Alliances in the county and find them in good working order and desirous to do all in their power to aid the State Business Agency, but not well versed in the secret workings of the Order. The Alliance to which I belong (No. 351), the first one organized in the county, is moving slowly but continuously, and with determination to succeed, if possible, in ridding herself of the burdens imposed by monopolies, &c.

Whenever I can, I speak in behalf of your valuable paper—hope soon to be able to send you some new subscribers. Long may it live in defense of the interests of the farmers.

Yours fraternally,

JAS. H. MAYFIELD.

INJURY TO HORSES.

A correspondent of the German-town Telegraph says: All persons owning and working horses are liable to have them injured in their feet by stepping on nails, thus temporarily or permanently crippling them. Wounds of this sort need prompt attention, and yet, few persons under such circumstances know what to do. If a wound caused by stepping on a nail bleeds freely, so much the better; but usually it does not. The tough fibrous sole is very elastic and is apt, therefore, to close up and prevent bleeding, at least very quickly after withdrawing the nail.

If near a blacksmith when an accident of this kind occurs, go to him as he has facilities for cutting out the sole of the foot, which should be done about the part pierced till the blood flows freely. Then take the horse home and wash out the bottom of the foot and apply to it flax-seed meal with hot water to the consistency of thin dough, with which fill the cavity of the foot. It will stay without being bound on if the horse stands on a floor. Of course, anything else that will keep the sole moist and soft and the wound open for free discharge will do; but I consider flax-seed poultice far better than any other, all things considered. How long a horse should be so kept is a matter of judgment, depending upon how serious the injury is, and how fast the animal gets along as to fever, etc., in the foot and ankle. A wound of this sort is always attended with danger, more especially if the nail inflicting the wound is rusty. Many a good animal has been lost by such injury that need not have been had the simple method above given been known to the owner. It is inexpensive, easily done, needs no professional skill, and I think is better than anything else that can possibly be recommended.

WHAT IS COTTOLENE?

Some of our readers are inquiring: "What is Cottolene?" It is the name given a combination of beef suet and cottonseed oil. Prof. Atwater, of Wesleyan University, says such an article with no other admixture, not even coloring matter, would make a valuable addition to our food products.

Of course the ingredients should be absolutely pure. It is claimed by one of the largest Chicago manufacturers that they have succeeded in producing just this article. They do not propose to label it "lard" and sell it in any sense as a counterfeit, but they have given it an honest name and propose to put it wholly on its own merits.

Some of our housekeepers—ladies of judgment and of taste in culinary matters—have pronounced unqualifiedly in favor of the new article of food. They have judged, of course, by the sample sent them. Some of our own acquaintances are much pleased with it

in cooking. They say the odor is less offensive than lard. The frying qualities—if we may use the expression—are particularly commended. The well known writer on cookery—Marion Harland—has given cottolene a trial and made a statement over her own signature. She says that cottolene, when melted up is as clear as water, and that it seldom burns, and will stand a higher degree of temperature without scorching than will any other frying medium she has used. "The same portion of cottolene," says this excellent authority, "may be employed twice and even three times. The articles fried in it under my care have covered a wide range, embracing croquettes, fish, fritters, both vegetables and fruits, egg plant, hominy, mush, fried bread, etc. In none of these could there be distinguished the unpleasant taste frequently noticed in food cooked in lard. Nor is the slight odor that comes from hot cottolene as disagreeable or pervasive as that of boiling lard. I have also found cottolene admirable for quick biscuit; they are devoid of the pork flavor that often permeates lard shortened biscuit. Mixed with butter and used in bread dough, cottolene is also good."—*Farm, Field and Stockman.*

THE EVANGEL OF WORK.

We live in times of unusual labor agitation. All over the world the toiler is coming to the front. But there has crept into this discussion the false notion that work is the primal curse of man, and to live without work is the heaven that haunts the lazy agitation of thousands.

And right here lurks one of the most dangerous heresies of the day. The old saying, "In the sweat of thy face shalt thou eat bread" was the announcement of a beneficent law rather than, as many think, a penal retribution to the end of time.

Man was intended to be the sovereign of land and sea. But that lordship implies the necessity of conquest. The great forces of nature will not tamely submit, nor the earth yield its best fruits to the idle. Man was given the dominion over the field and the forests, the cattle upon a thousand hills and the fish of the sea; but it is only by hard work that he comes into the full and joyous possession of his kingdom.

This is an old law, as old as the world, but only with the advance of civilization has its wisdom and beneficence been discerned, and what seemed to be a curse been transformed into a blessing. And this is the gospel which should be faithfully preached and believably received and practiced. It is needed to cure most of the ills of which men complain, and to lift man from the low plane of servile and unwilling toil. Only so far as he appreciates the nobility and divinity of labor will he come into his reward.

This is no mere pretty theory. All human experience has attested the blessed gospel of work. Nations have gone up the scale of wealth, greatness and power just so far as they have crowned the toilers and bread-winners. The greatest progress has been made where mind and muscle willingly and harmoniously toiled together. Upon this higher plane must be sounded the keynote of a more beneficent and uplifting labor agitation than has yet come into the hearts of men.

The beneficence of labor is seen in the bodily health which it confers. The world over, the workers are the happiest and most contented. Our zest and enjoyment is most keen when the natural powers are reasonably exercised. Appetite stronger and sleep sweeter. Waiting angels "knit up the raveled sleeve of care," as the poet says. Honest labor sweetens the cup of joy and gives that zest of life, that healthful appreciation of food and sleep, that wealth cannot buy.

And yet there are many in society, many who have the loudest voice in these labor agitations, who do little or no work. "Chin-music" is their forte. Indeed most people exult and dignify labor in theory, but seek to get rid of its performance. They would esteem it a great achievement to get rid of all effort, and a large share of work is done in order to enable the worker to rise above the necessity of toil. Nature has little use for drones in her hive and usually sends some disease, born of indolence and idleness, to cut short the career of human life. But, be all this as it may, it is the outcropping of the old heresy that regards work as a curse and not a blessing.—*California Patron.*

The longest American railway tunnel is the Hoosac tunnel.

VIEWS OF A SAMPSON COUNTY FARMER.

SALEM ALLIANCE, No. 600.

COL. L. L. POLK.—Dear Sir:—I am a regular reader of your valuable paper. I always spend about three hours every Tuesday night reading the interesting articles which it contains. I consider THE PROGRESSIVE FARMER an able educator. It contains many articles of valuable information. I have noticed several articles on farming which claim it does not pay. I wish to say here, that is a mistake. Our country would be a mere dwarfed skeleton without agriculture. Many farmers have become disgusted at farming for want of economy and management. People cry "hard times." That is all well enough. Nineteen-tenths of our farmers have brought on such times by refusing to raise corn, meat, clover, hay and stock. There is money in farming on almost every hand. Farmers need to grow a variety of crops. It will pay no farmer to grow cotton and buy his flour and meat. It will pay no farmer to buy flour at a cost of \$3.00 per barrel, because he can grow it much cheaper. It will pay no farmer to buy meat (North Carolina bacon) at 7 cents per pound because he can grow it much cheaper. Neither will it pay him to buy corn at 35 cents per bushel. I have never grown a pound of cotton, but one thing I know, no man can grow it for less than 8 cents per pound in our section. There are hundreds of farmers growing cotton at a cost of 8 cents per pound and paying 12½ cents per pound for Western meat. Brother farmers, you can not live by so doing.

My books for 1887 show that my corn cost me 31 cents per bushel; sweet potatoes, 11 cents per bushel; cabbage heads, one-eighth of a cent per head; syrup, 11 cents per gallon; oats, 18 cents per bushel; fodder, 21 cents per hundredweight; peas, 24 cents per bushel; turnips, 8 cents per bushel; beets, 9 cents per bushel; Irish potatoes, 15 cents per bushel; tomatoes, 8 cents per bushel; and pork at 4½ cents per pound.

I carefully measure all my lots, give each lot space in my books, and at the close of harvest season I and my farm by mutual consent settle.

There is one class of farmers living well. They grow no cotton or tobacco, but sell bacon for 12½ cents per pound which cost them about 5 cents per pound; they sell corn for \$1.00 per bushel which cost them 30 cents per bushel; they sell timothy hay for \$1.50 per hundredweight which cost them 48 cents; they sell red clover hay for \$1.00 per hundredweight which cost them 21 cents; they sell sweet potatoes for 40 cents which cost them 11 cents. This is exactly what the farmer is doing who raises the above articles of food. The Alliance will enable thousands of farmers to see their own mistakes. Cotton crops will be shorter in our section next year. Most of the members of our Lodge will sow one-fourth of an acre in lucerne clover. A few will sow mixtures of grass seeds for permanent pasture. Brethren, wake up and let us go along with the farmer who lives well at home, who stays out of debt and who is able to educate his children.

Fraternally,

G. I. SMITH.

LETTER FROM BLADEN.

WHITE LAKE ALLIANCE, No. 983,

SAND BLUFF, Bladen Co., N. C.

EDITOR FARMER:—Over four months ago our Alliance was organized with five members; we now number over twenty. The reason for our small number is owing to the thinly settled neighborhood. Nevertheless, we are enthusiastic in the cause, and by resolution in the Alliance we heartily endorse every measure that we have seen in your noble paper in regard to protesting against all monopolies of any kind that would have a tendency to bear hard upon the people, in particular, the Jute Bagging Trust Co. After we organized, brother Secretary and myself were speaking of the Constitution, and both agreed there was not a clause in it that we would have out, or add to it in the least. We have some county offices filled by Alliance men. Our young friend, C. C. Lyon, was re-elected to the Legislature. A sterling Democrat is bared by his profession from being an Alliance man. He was elected by an increased majority. I have been made your correspondent by my Alliance, though a poor one; still I hope you will give it publicity in our State Organ. I will write more definitely in my next.

Fraternally yours,

JOEL G. LAYTON.